

**REMARKS**

Claims 1-16, 18 and 20 are pending in this application. By this Amendment, claim 16 is amended to overcome the rejections under 35 U.S.C. §103(a). Claims 7 and 20 are amended to correct antecedence. Claims 17 and 19 are canceled.

No new matter is added by this Amendment. Support for the new language added to claim 16 can be found in original claims 19 and 20.

The courtesies extended to Applicants' representative by Examiners Dupuis and Font at the interview held on June 30, 2005, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicants' record of the interview.

**I. Allowable Subject Matter**

Applicants note with appreciation that claims 10-15 are in condition for allowance.

**II. Rejection Under 35 U.S.C. §103(a)**

**A. Agrawal in view Labeye**

Claims 1, 3, 4, 6-9, 16, 17, 19 and 20 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Publication No. 2002-0011758 ("Agrawal") in view of U.S. Patent No. 5,612,815 ("Labeye"). This rejection is respectfully traversed.

The Patent Office alleges that Agrawal teaches a switch that comprises a thermal drive actuator having associated thermal latching actuators wherein each thermal latching actuator has translating latch teeth. The Patent Office further alleges that the switch includes a movable portion connected by suspension elements and that a tether (1360a) connects the thermal drive actuators to the movable portion. The Patent Office admits that Agrawal does not teach or suggest a movable waveguide portion as recited in claim 1 and 16. Thus, the Patent Office introduced Labeye as teaching an optical waveguide portion suspended by flexible arms. According to the Patent Office, it allegedly would have been obvious for one

of ordinary skill in the art to have used the switch taught by Agrawal for optical switching as taught by Labeye. Applicants disagree with the Patent Office's assertions.

Applicants submit that even if Agrawal and Labeye were combined as alleged by the Patent Office, the optical switch recited in claims 1 and 16 would not have been achieved.

The Patent Office alleges that feature 1360a of Agrawal corresponds to the tether recited in claims 1 and 16. Feature 1360a in Agrawal connects the microactuator 1300a to a member 1460. During the June 29, interview Examiner Dupuis explained that he was interpreting feature 1360a as being both a tether and a linkage.

However, as discussed during the interview, claims 1 and 16 require two separate and distinct features, one being the tether and the other being the linkage. Claim 1 requires a tether connecting one or more thermal drive actuators to the movable waveguide platform and a linkage defining one or more linkage teeth for orthogonal connection to the translating latch teeth of the one or more thermal drive actuators located to determine one or more latched state positions wherein electrical stimuli is timed to actuate said one or more thermal drive and thermal latch actuators so as to switch between equilibrium and latched states. Claim 16 similarly requires a tether connecting the thermal drive actuator to the movable shuttle platform and a linkage connecting the thermal drive actuator to translating latch teeth of one or more latch actuators.

As discussed and agreed to during the interview, Agrawal clearly does not teach a linkage and then a separate tether. Accordingly, even if the teachings of Agrawal and Labeye were to have been combined, one would not have achieved an optical switch including both a tether and a linkage as recited in claims 1 and 16.

For the foregoing reasons, Applicants submit that claims 1, 3, 4, 6-9, 16, 17 and 20 are patentable over the teachings of Agrawal and/or Labeye. Reconsideration and withdrawal of the rejection are respectfully requested.

**B. Agrawal in view of Labeye, further in view of Lee**

Claims 2, 5 and 18 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Agrawal in view of Labeye, and further in view of Lee et al., "Surface Micromachined Free-Space Fiber Optic Switches with Integrated Microactuators for Optical Fiber Communications Systems," 1997 International Conference on Solid-State Sensors and Actuators, June 16-19, 1997, pages 85-588 ("Lee"). This rejection is respectfully traversed.

Lee does not remedy the deficiencies of Agrawal and Labeye. In particular, Lee does not teach or suggest an optical switch having a tether connecting one or more thermal drive actuators to the movable waveguide platform and a linkage defining one or more linkage teeth for orthogonal connection to the translating latch teeth of the one or more thermal drive actuators located to determine one or more latched state positions wherein electrical stimuli is timed to actuate said one or more thermal drive and thermal latch actuators so as to switch between equilibrium and latched states as recited in claim 1. Similarly, Lee does not teach or suggest an optical switch having a tether connecting the thermal drive actuator to the movable shuttle platform and a linkage connecting the thermal drive actuator to translating latch teeth of one or more latch actuators as recited in claim 16.

For the foregoing reasons, Applicants submit that claims 2, 5 and 18 are patentable over Agrawal, Labeye and/or Lee. Reconsideration and withdrawal of the rejection are thus respectfully requested.

**III. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-16, 18 and 20 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Joel S. Armstrong  
Registration No. 36,430

Leana Levin  
Registration No. 51,939

JAO:LL/hs

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**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

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